

FINAL PROJECT
PROPOSAL

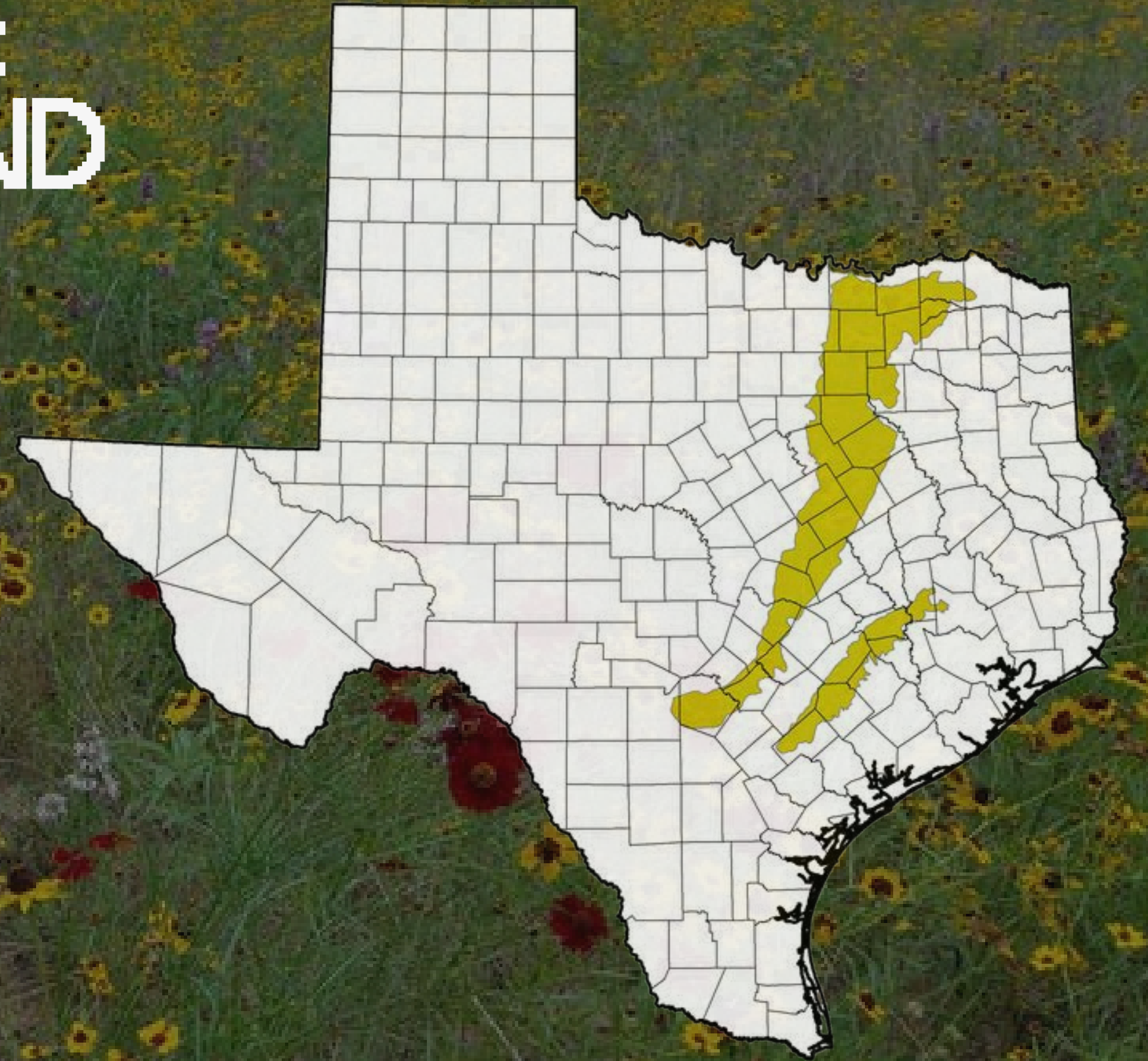
MADDIE OLSEN
2025-2026

PRAIRIE INTERFACES

IMAGINING LOST LANDSCAPES THROUGH E-TEXTILE INSTALLATION

LESS THAN 1% OF THE
ORIGINAL BLACKLAND
PRAIRIE REMAINS.

LETS IMAGINE ITS
FUTURE TOGETHER.



In a place that mostly looks like this,
you learn to see nature up close.





“The prairie remnants of north-central Texas are islands in a sea of injured land.”

Jim Eidson, quoted by Amy Martin in Wild DFW.

“A prairie is receptive and horizontal — the sky is half the landscape. Yet it begs intimate inspection. Kneel and gaze at the first eighteen inches.”

Amy Martin in Wild DFW.

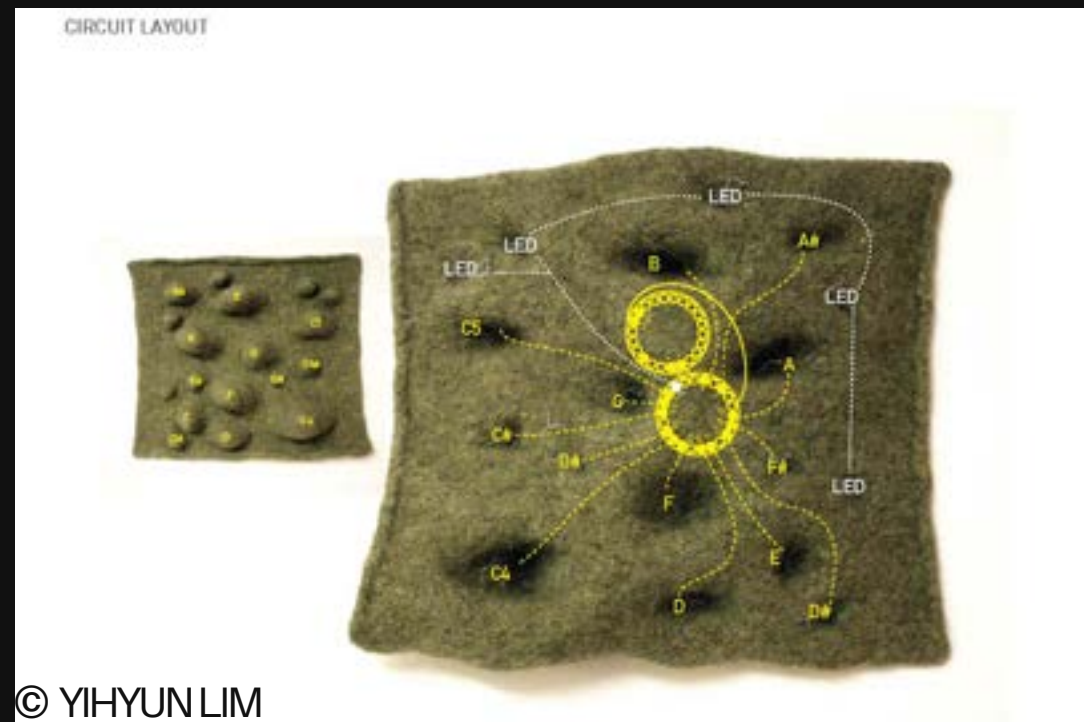
“Textural interfaces not only create tactile landscapes that invite touch and encourage exploration, but also enable unique sensing behaviors that emerge from yarn interactions.”

Choi et al. in PileUp: A Tufting Approach to Soft, Tactile, and Volumetric E-Textile Interfaces.

PROJECT REFERENCES



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FELTED TERRAIN: INTERACTIVE KNITTED LANDSCAPE



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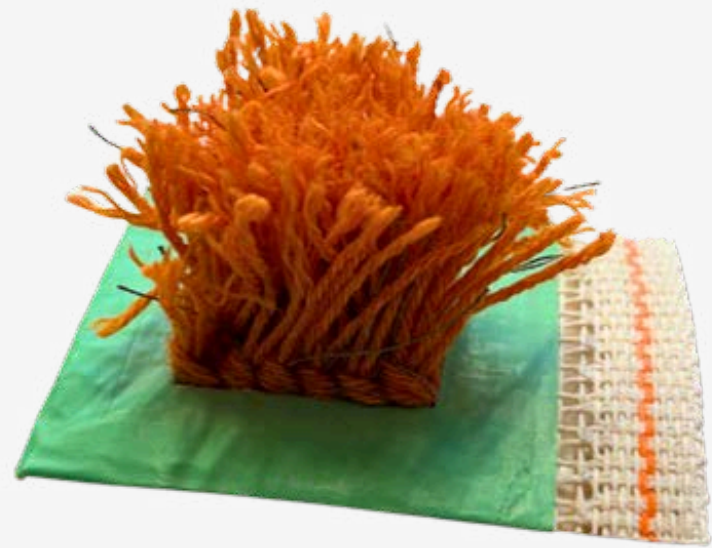
CALIFORNIA DROUGHT RUG

TOP: SHAGGY TAPESTRY
BOTTOM: FELTED TERRAIN CIRCUIT LAYOUT

FOCUS AREAS

TAPESTRY

Inspired by the sensory qualities of prairie grasses, conductive threads embedded in a shag textile invite and capture interaction.



ELECTRONICS & CODE

Arduino and Processing use serial data from the soft sensors to build a digital prairie landscape.

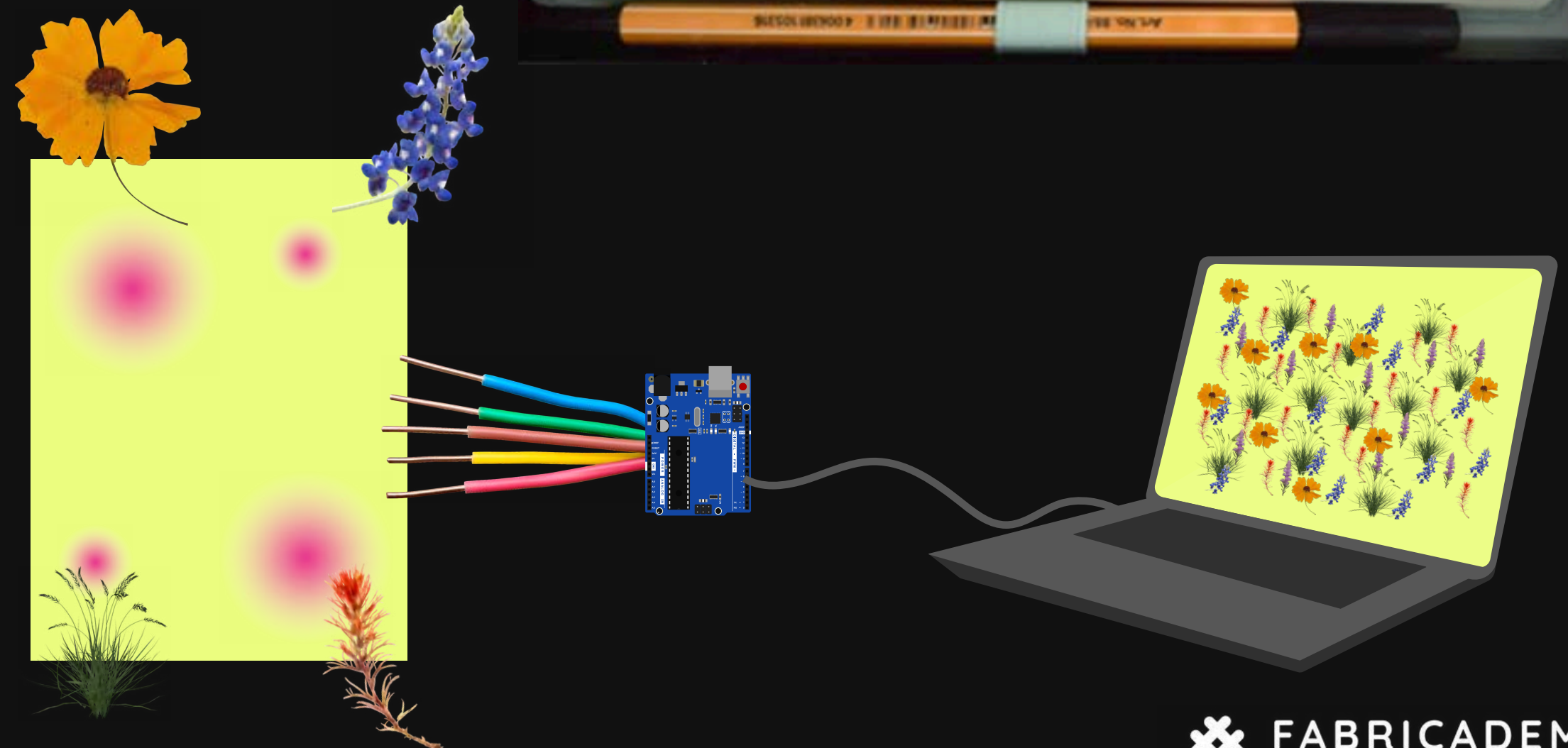
This output offers opportunities to directly see the impact of human touch on a ecosystem in a constructive way.

BIOCHROMES



Some flora and fauna native to the region are known natural dyes. Other dyestuffs used reference the colors of local wildflowers.

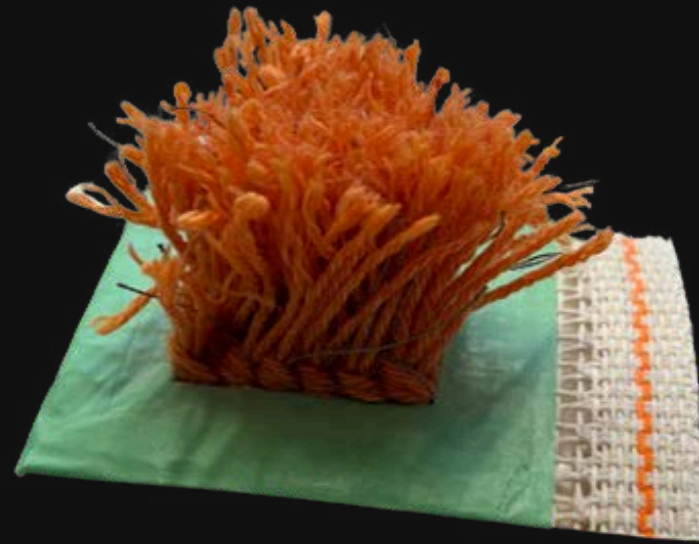
PLANNING



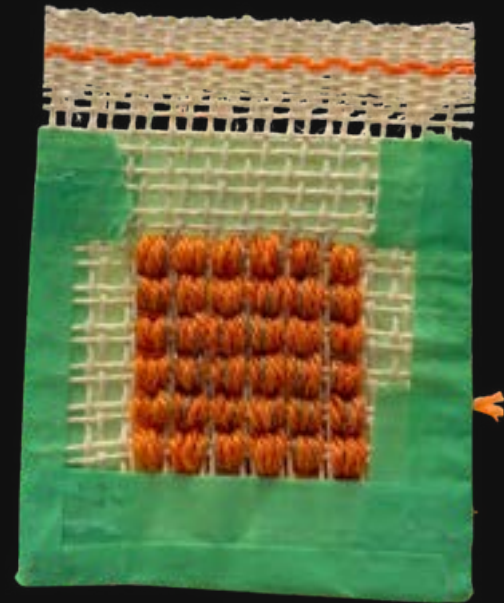
TESTING



front



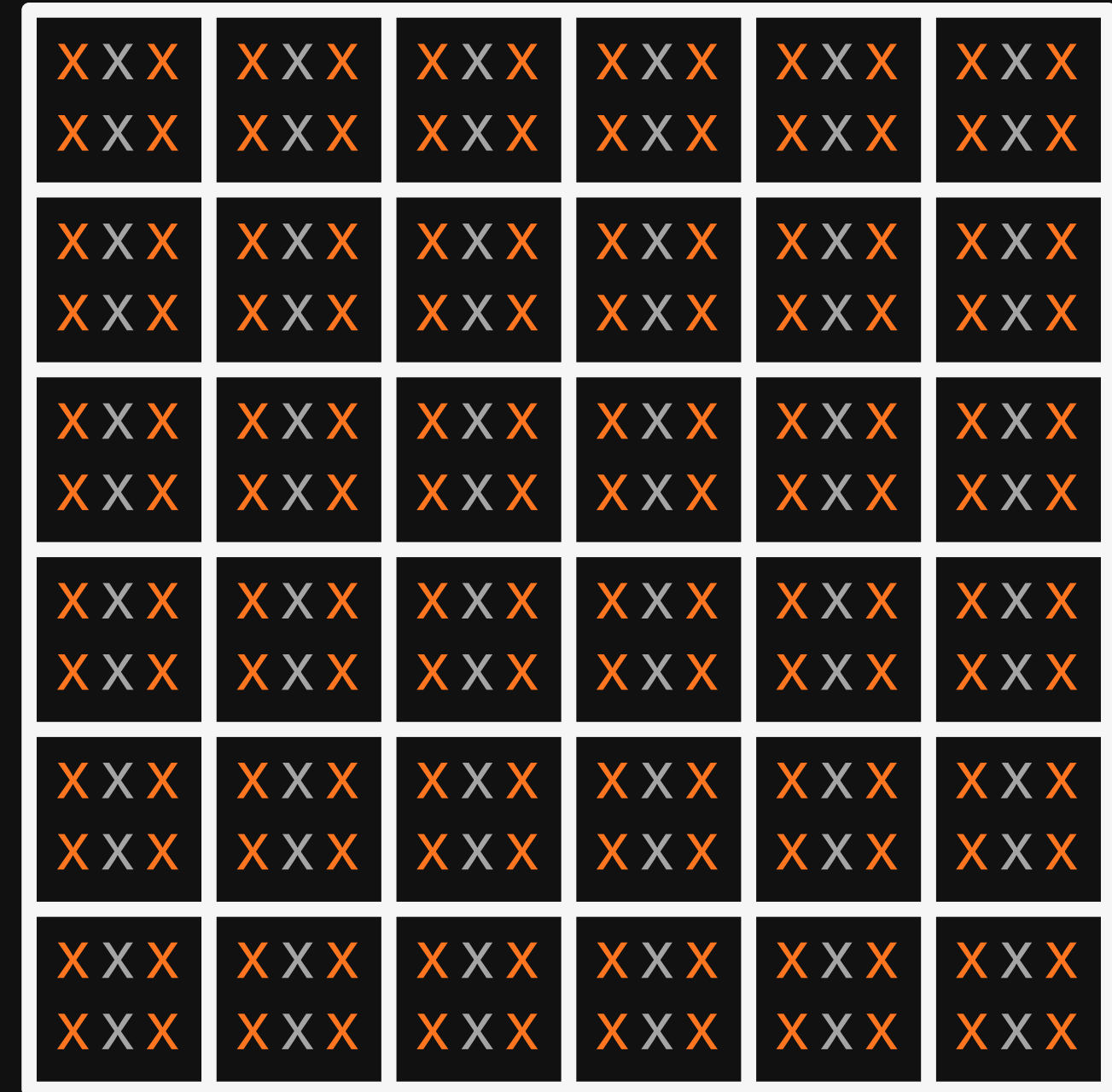
side



back

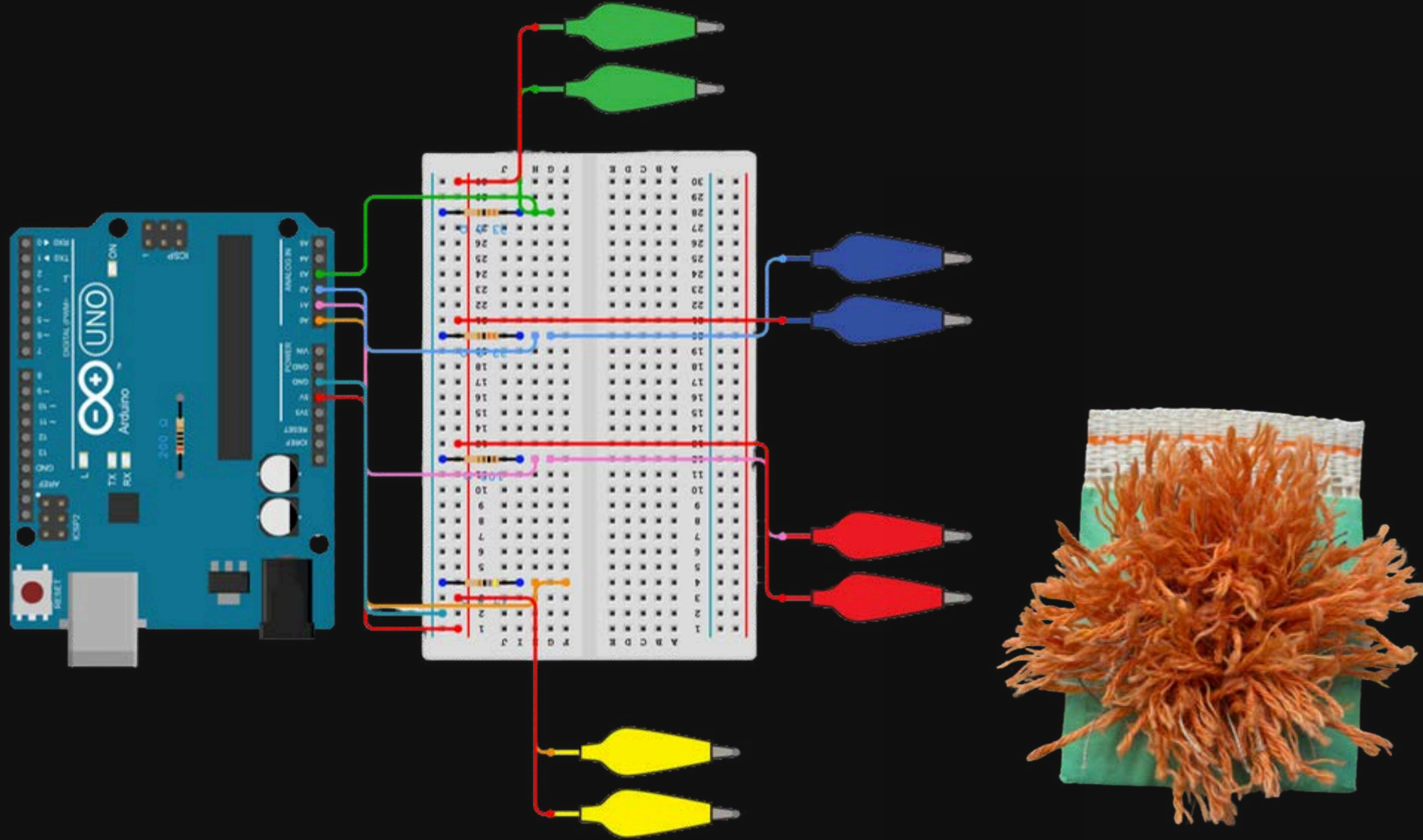


materials



sensor construction

CONNECTING



THANK YOU